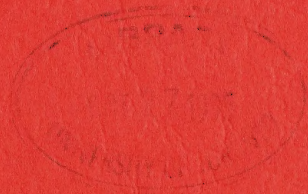


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MARCH 1995

MINIMUM DISTANCE SEPARATION I (MDS I)

Government
Publication

(Replaces the Minimum Distance Formula I in the *Agricultural Code of Practice*, 1976)

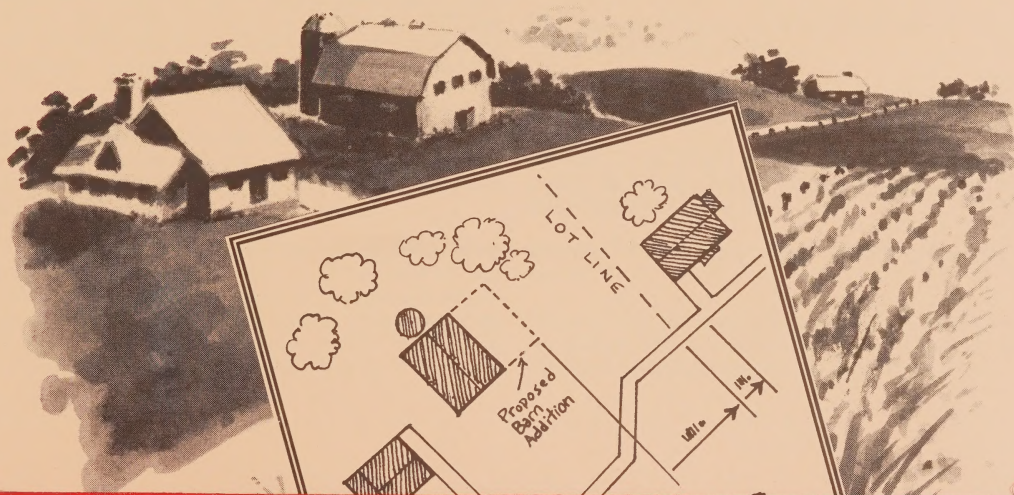


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MINIMUM DISTANCE SEPARATION II (MDS II)

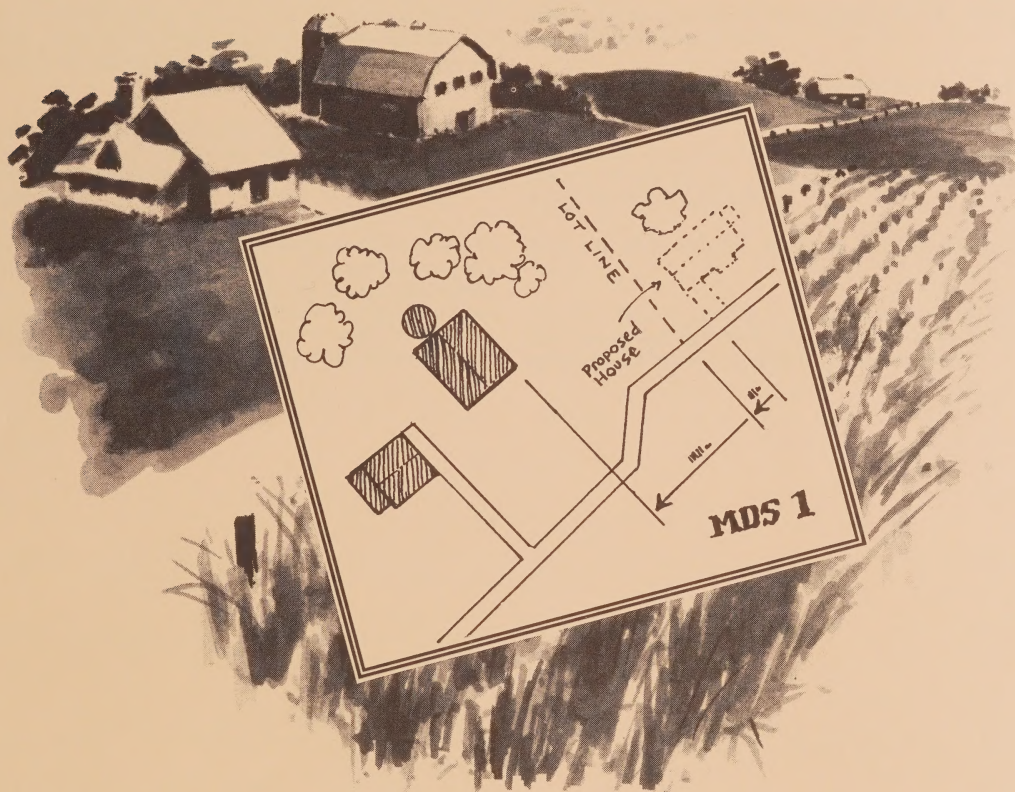
(Replaces the Minimum Distance Formula II in the *Agricultural Code of Practice*, 1976)



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MINIMUM DISTANCE SEPARATION I (MDS I)

(Replaces the Minimum Distance Formula I in the *Agricultural Code of Practice*, 1976)



ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS
ONTARIO MINISTRY OF ENVIRONMENT AND ENERGY



Ministry of Agriculture,
Food and Rural Affairs

This document is to be used for the review of planning and development applications. It provides distance separation requirements between existing farm and new non-farm uses.



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BACKGROUND

A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses. Industrial parks, residential subdivisions and commercial areas as separate parts of an urban area are a reflection of this principle.

The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions particularly when the nuisance is perceived to exceed acceptable levels.

In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential complaint and the sensitivity of the neighbouring land use.

The primary purpose and use of prime agricultural areas should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices.

Should complaints about odours, noise or dust occur, the Ministry of the Environment and Energy will respond. If the complaint is valid, Ministry of the Environment and Energy staff in cooperation with the farm operator and in consultation with Ministry of Agriculture Food and Rural Affairs staff recommend measures to resolve the complaint. If the complainant still has concerns they may request a hearing by the

Farm Practices Protection Board. This Board can only hold hearings in regard to odour, dust or noise concerns. The Board rules whether the occurrence is a normal farming practice.

The Minimum Distance Separation (MDS) is a tool to determine a recommended distance between a livestock facility and another land use. The objective is to prevent land use conflicts and minimize nuisance complaints from odour. MDS does not account for noise and dust.

Minimum Distance Separation will vary according to a number of variables including type of livestock, size of the farm operation, type of manure system and the form of development present or proposed.

MDS I provides minimum distance separation for new development from existing livestock facilities.

MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development.

The *Guide To Agricultural Land Use* contains advice on avoiding or reducing the potential for conflict between neighbouring land uses through appropriate farm practices.

These three above documents replace the 1976 *Agricultural Code of Practice*.

Ultimately, land use planning decisions (including MDS) and good farm practices must go hand-in-hand to promote harmony in the rural community and to ensure agriculture as an ongoing activity.



IMPLEMENTATION GUIDELINES

General

1. MDS formulae and criteria are to be referenced in official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are a permitted use and is to be implemented at the time of planning and/or development review.
2. MDS I applies when locating development in proximity to existing livestock facilities on an existing or proposed separate parcel of land.
3. MDS I calculates a separation distance based on either the actual housing capacity or potential capacity according to tillable hectares (maximum 150 Livestock Units), whichever is greater. Existing housing capacity can be based on Canada Plan Service data, available from any OMAFRA office.
4. MDS I is applied in any non-urban designation where agriculture and the keeping of livestock is a permitted use. The Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) does not apply MDS I to proposed non-agricultural uses in an approved urban designation; however, individual municipalities may require the MDS I separation distances be met for livestock facilities located within an urban designation as stipulated in their Official Plan or Zoning By-law.
5. MDS I applies to empty livestock facilities if they are structurally sound and reasonably capable of housing livestock. In such cases, Animal Group (Table 1) will be based upon the most probable use.
6. MDS I is applied to urban expansions. In this instance only, the separation distance is based on the existing housing capacity and not tillable hectares.
7. MDS I only applies to livestock facilities. It is not used to calculate separation distances from uses such as abattoirs, apiaries, greenhouses, kennels and mushroom farms.
8. The direction of the prevailing winds, the presence of berms or other forms of screening do not affect MDS I.
9. The separation distances generated allow for some future expansion of adjacent livestock facilities.
10. MDS I is to be applied to new applications even though there may be existing non-farm uses that do not conform to the MDS I requirements. Where there are 4 or more non-farm uses closer to the subject livestock facility and in immediate proximity to the current application, MDS I will not be applied. The current application must not be located any closer to the livestock facility than the existing non-farm uses.

Official Plan Amendments

11. In addition to Guideline #1 above, MDS I is applied to lands being considered for a non-agricultural designation through the Official Plan Amendment process.

Zoning By-Law Amendments

12. In addition to Guideline #1 above, MDS I is applied when new development is proposed by way of a re-zoning in a designation where agriculture is a permitted use.

Consent Applications

13. MDS I is applied to a proposed lot, vacant or with existing structures.
14. MDS I is not applied to a proposed lot with an existing building when that building is already located on a parcel of land separate from the subject livestock facility.

Lots of Record

15. Municipalities have the option, but are encouraged, to apply MDS I to building proposed for existing lots of record. The application of MDS I in such cases will take its direction from the municipal planning document.

Measurement

16. Applications to create an industrial, commercial, institutional, recreational or residential uses by consent or subdivision are measured as the shortest distance between the livestock facility and the area of land use change.
17. If the consent is for a residential lot (vacant or residence existing) and the lot is no greater than the size required to provide private septic services (generally no greater than 1 hectare in size), the measurement is taken as the shortest distance between the livestock facility and the lot line of the lot being created.
18. Where larger lots may be permitted, a suitable location must be identified for a building envelope of approximately one hectare outside of the minimum separation distance.

DEFINITIONS

Active Recreational Use:

Recreational use usually with buildings and/or with a concentration of uses such as golf courses, other playing fields, trailer parks, campgrounds and conservation areas with facilities.

Agriculturally Related Commercial/Industrial Uses:

Uses directly related to agriculture and necessary in close proximity to farm operations, such as animal husbandry services, produce or grain storage facilities, or farm machinery outlets.

Animal Group:

Livestock and poultry grouped according to their manure production.

Housing Capacity:

Total maximum livestock capacity for the facility at any one time.

Livestock Facilities:

Livestock barns where animals or poultry are housed, including beef feedlots, and the associated manure storage.

Livestock Unit:

Equivalent values for various types of animals and poultry based on manure production and production cycles.

Multiple Residential:

Three or more residential units in same building.

Passive Recreational Use:

Recreational use not requiring buildings and not altering the soil or topography, such as open space and environmental areas.

Rural Residential Cluster:

Four or more adjacent rural residential lots, generally 1 hectare or less in size, sharing a common boundary. Lots located directly across a road from one another shall be considered as having a common boundary.

Tillable Hectares:

Land including pasture that can be worked or cultivated.

Urban Expansion:

Outward expansion of cities, towns, villages, and hamlets for such uses as residential, recreational, institutional, and commercial and industrial.

MINIMUM DISTANCE SEPARATION I (MDS I) CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application MEETS ☐ DOES NOT MEET ☐ MDS requirements for the barn and manure storage.

MINIMUM DISTANCE SEPARATION I (MDS I) CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application **MEETS** ☐ **DOES NOT MEET** ☐ **MDS requirements for the barn and manure storage.**

MINIMUM DISTANCE SEPARATION I (MDS I) CALCULATION SHEET FOR NON-AGRICULTURAL USES

USE: To determine the required Minimum Distance Separation (MDS I) for non-agricultural uses establishing or expanding in proximity to livestock facilities

PURPOSE: To reduce the potential for odour conflicts between existing livestock facilities and proposed neighbouring land uses

APPLICATION: MDS will be used for:

- assessing official plan amendments
- assessing zoning bylaw amendments
- evaluating consent applications
- other land use proposals

The following information is to be completed as it relates to the livestock operation. A separate calculation sheet is to be filled out for each livestock operation in proximity to the proposed non-agricultural use.

APPLICANT'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

FARMER'S NAME _____ PHONE _____

ADDRESS _____ POSTAL CODE _____

COUNTY/REGION _____ TOWNSHIP _____ LOT _____ CONC. _____

FILE # _____ EVALUATION DATE _____ EVALUATOR _____

Minimum Distance Separation required from Livestock Facility = _____ metres (from Table 2)

Actual distance as reported or estimated from Livestock Facility = _____ metres

Minimum Distance Separation required from Manure Storage = _____ metres (from Table 3)

Actual distance as reported or estimated from Manure Storage = _____ metres

This application MEETS ☐ DOES NOT MEET ☐ MDS requirements for the barn and manure storage.

ASSESSMENT OF THE LIVESTOCK FACILITY

To calculate Livestock Units, complete Step 1 based on information in Table 1 below.

STEP 1. TOTAL LIVESTOCK UNITS

Column 1 TYPE OF LIVESTOCK	Column 2 HOUSING CAPACITY	Column 3 NUMBER OF ANIMALS PER LIVESTOCK UNIT (From Table 1)	Column 4 NUMBER OF LIVESTOCK UNITS (Col. 2/Col.3)
(A) = TOTAL LIVESTOCK UNITS (sum of Column 4)			(A)

If there are more than 300 livestock units, reference must be made to a full set of tables available from the Ontario Ministry of Agriculture, Food and Rural Affairs

TABLE 1. ANIMAL GROUPS

ANIMAL GROUP 1	ANIMAL GROUP 2	ANIMAL GROUP 3	ANIMAL GROUP 4	ANIMAL GROUP 5
1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals	1 Livestock Unit equals
200..Chicken Broilers 1.....Horse ³	4.....Adult Sheep ³ 1....Beef Cow ¹ Confinement 10...Feeder Lambs 100..Ducks 5.....Emu 4.....Adult Goats ³ 10....Feeder Goats 3.....Ostrich 500..Pullets 50...Turkeys (>10kg) 75...Turkeys (5-10kg) 100..Turkeys (<5kg)	1....Beef Cow ¹ Yard/Barn 2....Beef Feeder Yard/Barn 1....Dairy Cow ^{1,2} 2...Dairy HeiferYard/Barn 40...Adult Rabbits ⁴ 3....Red Veal <300kg 125..Chicken Breeder Layers 75...Turkey Breeder Layers	80.....Adult Mink ⁴ 40.....Adult Fox ⁴ 125....Caged Layers	4....Feeder Hogs 5....Sows/Boars 20..Weaners 4-30kg 6....White Veal

¹ Includes calf to 150 kg, ² Multiply the number of milking cows by 1.5 to account for dry cows, heifers and calves on the same farm,

³ Includes offspring until weaned, ⁴ Includes offspring to market size.

Select Animal Group **1 2 3 4 or 5**, depending on type of animals on farm. If there are animals from different groups, select the highest group number. The group number is used when referring to Table 2.

STEP 2. LAND BASE ASSESSMENT (B)

Number of tillable hectares* on site _____ x 5 = _____ (B) Potential Livestock Units

*Maximum (B) is 150 Livestock Units.

STEP 3.

Enter the GREATER OF (A) Total Livestock Units OR (B) Potential Livestock Units _____

Use this figure to enter Column 1 of Table 2.

STEP 4. TABLE 2. MINIMUM DISTANCE SEPARATION FROM LIVESTOCK FACILITY

Read across appropriate line from Column 1 to respective Animal Group and Land Use Type. This number is the Minimum Distance Separation requirement in metres from a livestock facility.

COLUMN 1	TYPE "A" LAND USE					TYPE "B" LAND USE				
	To permit: • Up to 3 rural residential lots, either by consent or by plan of subdivision • the severance of an existing dwelling • passive recreational • the building of a dwelling on an existing lot of record • agriculturally related commercial • industrial					To permit: • residential subdivision • active recreational • institutional • commercial • urban expansion • multiple residential • or result in a Rural Residential Cluster				
Greater of Livestock Units (A) or Potential Livestock Units (B)	Animal Group					Animal Group				
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1-5	39	42	48	60	85	73	78	90	112	160
10	55	60	68	85	98	104	112	128	160	183
15	65	70	80	100	115	122	132	151	188	215
20	72	78	89	111	127	135	146	167	208	238
25	78	84	95	119	136	146	157	179	224	256
30	82	88	101	126	144	154	166	189	237	271
35	86	92	106	132	151	161	173	198	247	283
40	89	96	110	137	157	167	180	206	257	294
45	92	99	113	142	162	173	186	213	266	304
50	95	102	117	146	167	178	192	219	274	313
55	98	105	120	150	172	183	197	225	282	322
60	100	108	123	154	176	188	202	231	289	330
65	102	110	126	158	180	192	207	236	295	338
70	105	113	129	161	184	196	211	241	302	345
75	107	115	131	164	188	200	215	246	308	352
80	109	117	134	167	191	204	219	251	313	358
85	111	119	136	170	194	207	223	255	319	364
90	112	121	138	173	198	211	227	259	324	370
95	114	123	140	176	201	214	230	263	329	376
100	116	125	143	178	204	217	234	267	334	382
110	119	128	146	183	209	223	240	275	343	392
120	122	131	150	188	214	229	246	281	352	402
130	125	134	154	192	219	234	252	288	360	411
140	127	137	157	196	224	239	257	294	368	420
150	130	140	160	200	228	244	262	300	375	428
160	133	143	164	205	234	250	269	307	384	439
170	136	147	168	210	240	256	275	314	393	449
180	139	150	172	214	245	262	282	322	402	460
190	143	154	175	219	251	268	288	329	411	470
200	146	157	179	224	256	273	294	336	420	480
210	149	160	183	229	262	279	301	344	429	491
220	152	164	187	234	267	285	307	351	439	501
230	155	167	194	239	273	291	313	358	448	512
240	158	171	195	244	278	297	320	365	457	522
250	162	174	199	248	284	303	326	373	466	532
260	165	177	203	253	290	309	332	380	475	543
270	168	181	207	258	295	315	339	387	484	553
280	171	184	210	263	301	321	345	395	493	564
290	174	188	214	268	306	327	352	402	502	574
300	177	191	218	273	312	333	358	409	511	584

Continue to TABLE 3 (next page).

STEP 5 TABLE 3. MINIMUM DISTANCE SEPARATION FROM MANURE STORAGE

The following table is used to calculate MDS requirements in metres from manure storages associated with livestock facilities.

Using the resulting MDS distance from Table 2, read across the appropriate line to Column 1, 2, 3 or 4. Select the distance under the appropriate Land Use Type.

This is the MINIMUM DISTANCE SEPARATION REQUIREMENT from the manure storage of a livestock facility for the establishment of a non-farm use.

Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.

Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or runoff liquids from yards. If yards are scraped into runoff storage, use column 3 when runoff storage is a concrete or steel tank and column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.

Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.

Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.

MANURE STORAGE DISTANCE

Distance for Livestock Facility from Table 2 (Step 4). (m)	Column 1		Column 2		Column 3		Column 4	
	Covered Storage Systems (m)		Open Solid and Runoff Storage Systems (m)		Open Liquid Tank and Runoff Storage Systems (m)		Earthen Liquid and Runoff Storage Systems (m)	
	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use	Type "A" Land Use	Type "B" Land Use
40	40	—	55	—	119	—	324	—
45	45	—	60	—	123	—	326	—
50	50	—	65	—	127	—	328	—
55	55	—	70	—	132	—	331	—
60	60	—	74	—	136	—	333	—
65	65	—	79	—	140	—	335	—
70	70	70	84	103	144	241	337	686
75	75	75	89	107	149	246	339	689
80	80	80	94	112	153	250	342	691
85	85	85	99	117	157	254	344	693
90	90	90	103	122	161	258	346	695
95	95	95	108	127	165	263	348	698
100	100	100	113	132	170	267	351	700
110	110	110	123	141	178	275	355	704
120	120	120	133	151	187	284	359	709
130	130	130	142	161	195	292	364	713
140	140	140	152	171	203	301	368	717
150	150	150	162	180	212	309	373	722
160	160	160	172	190	220	318	377	726
170	170	170	181	200	229	326	382	731
180	180	180	191	209	237	335	386	735
190	190	190	201	219	246	343	390	740
200	200	200	210	229	254	351	395	744
210	210	210	220	239	263	360	399	749
220	220	220	230	248	271	368	404	753
230	230	230	239	258	280	377	408	757
240	240	240	249	268	288	385	413	762
260	260	260	268	287	305	402	421	771
280	280	280	288	307	322	419	430	780
300	300	300	307	326	339	436	439	788
320	320	320	327	346	356	453	448	797
340	340	340	346	365	372	470	457	806
360	360	360	366	385	389	487	466	815
380	380	380	385	404	406	504	475	825
400	400	400	404	423	423	521	483	833
450	450	450	453	472	465	563	506	855
500	500	500	501	520	508	605	528	877
550	550	550	550	569	550	648	550	899

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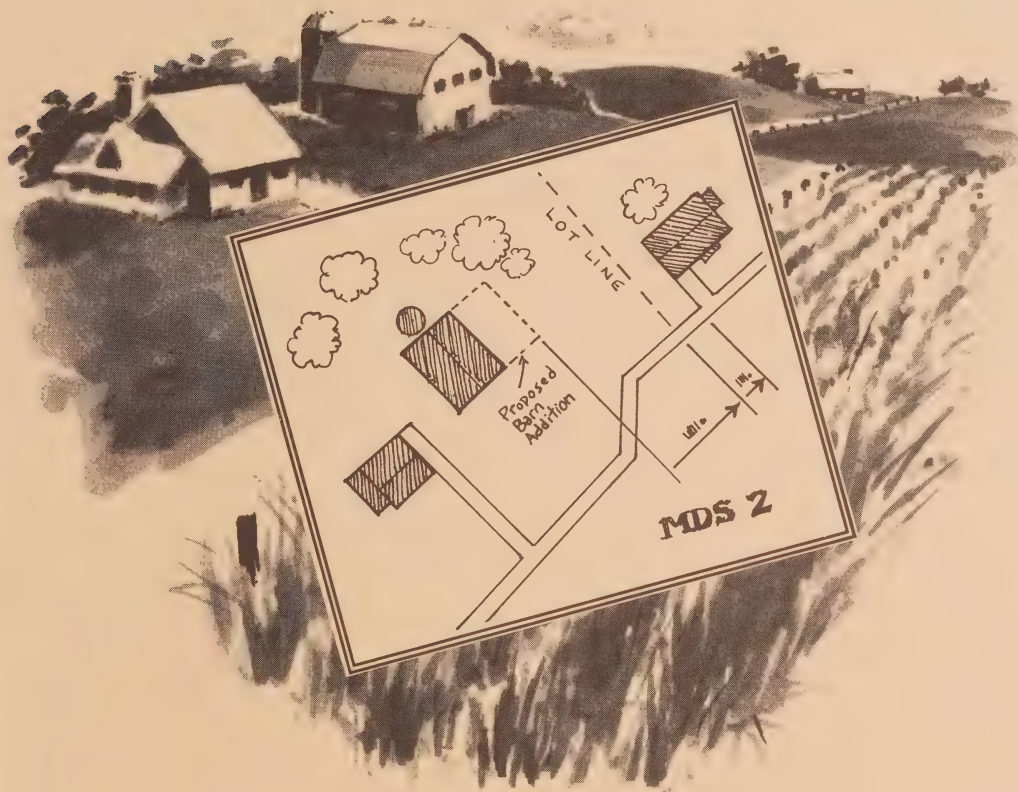


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MINIMUM DISTANCE SEPARATION II (MDS II)

(Replaces the Minimum Distance Formula II in the *Agricultural Code of Practice*, 1976)



ONTARIO MINISTRY OF AGRICULTURE, FOOD AND RURAL AFFAIRS
ONTARIO MINISTRY OF ENVIRONMENT AND ENERGY



Ministry of Agriculture,
Food and Rural Affairs

This document provides minimum distance separation
requirements for livestock facilities within agricultural areas.

BACKGROUND

A principle of land use planning is the grouping together of compatible land uses and the separating of incompatible land uses. Industrial parks, residential subdivisions and commercial areas as separate parts of an urban area are a reflection of this principle.

The agricultural community generally acknowledges that even with the best management, noise and dust cannot be eliminated from certain agricultural operations and that odours are associated with livestock production. Not all rural residents, including some farmers, can accept these conditions particularly when the nuisance is perceived to exceed acceptable levels.

In rural areas, this principle of separating different and incompatible land uses has not always been applied. Where there has been sufficient separation distance between differing rural uses, however, there have been few complaints. The distance separation will vary with the source of the potential complaint and the sensitivity of the neighbouring land use.

The primary purpose and use of prime agricultural areas should be for agriculture. Non-farm residents who seek the advantages of country life must be aware of the noise, odour and dust associated with normal farm practices.

Should complaints about odours, noise or dust occur, the Ministry of the Environment and Energy will respond. If the complaint is valid, Ministry of the Environment and Energy staff in cooperation with the farm operator and in consultation with Ministry of Agriculture, Food and Rural Affairs staff recommend measures to resolve the complaint. If the complainant still has concerns they may request a hearing by the

Farm Practices Protection Board. This Board can only hold hearings in regard to odour, dust or noise concerns. The Board rules whether the occurrence is a normal farming practice.

The Minimum Distance Separation (MDS) is a tool to determine a recommended distance between a livestock facility and another land use. The objective is to prevent land use conflicts and minimize nuisance complaints from odour. MDS does not account for noise and dust.

Minimum Distance Separation will vary according to a number of variables including type of livestock, size of the farm operation, type of manure system and the form of development present or proposed.

MDS I provides minimum distance separation for new development from existing livestock facilities.

MDS II provides minimum distance separation for new or expanding livestock facilities from existing or approved development.

The *Guide To Agricultural Land Use* contains advice on avoiding or reducing the potential for conflict between neighbouring land uses through appropriate farm practices.

These three above documents replace the 1976 *Agricultural Code of Practice*.

Ultimately, land use planning decisions (including MDS) and good farm practices must go hand-in-hand to promote harmony in the rural community and to ensure agriculture as an ongoing activity.



IMPLEMENTATION GUIDELINES

The applicant completes the MDS II Data Sheet available from OMAFRA or municipal offices. The completed data sheet is submitted to the OMAFRA Agricultural Engineer, or, in some municipalities, directly to the municipal office for determination of separation distances.

General

1. MDS formulae and criteria are to be referenced in official plans and included in by-laws and are to be applied in designations and zones where livestock facilities are a permitted use and is to be implemented at the time of planning and/or development review.
2. MDS II applies when an application is made for a new, existing, modified or expanding livestock facility. The application may be for a building permit or an application under the Ontario Certificate of Compliance Program.
3. MDS II applies only to livestock and poultry facilities. It is not used to calculate separation distances from uses such as kennels, apiaries, greenhouses, mushroom farms, stockyards, assembly yards, or slaughterhouses.
4. MDS II is to be applied in any non-urban designation where agriculture and the keeping of livestock is a permitted use. MDS II is not applied where the livestock facility is within an approved urban designation.
5. The direction of the prevailing winds, the presence of berms or other forms of screening do not affect the calculated MDS II distance.
6. In cases of rebuilding such as after a fire, municipalities have the option of applying MDS II.
7. Minor variances to the MDS II distances can be considered based on site specific circumstances. Municipal officials must consult with Ontario Ministry of Agriculture, Food & Rural Affairs staff when considering a variance application. Conditions that meet the intent, if not the precise distance of MDS II or mitigate environmental impacts, will receive further consideration.

Measurement

8. Distances to the Nearest Neighbours Dwelling are measured as the shortest distance between the barn, or manure storage and the dwelling.
9. Distances to Residential Subdivisions, Urban Areas, areas zoned or designated Agriculturally Related Commercial Use, Passive Recreational, Institutional, Active Recreational or Commercial/Industrial are measured as the shortest distance between the barn or manure storage and the land uses noted above.

10. Distances to the Nearest Side Lot Line, Rear Lot Line, and Nearest Road Allowance are measured between the closest point of the barn or manure storage and the lot line or road allowance.
11. All distances are measured from the closest point of the barn used for animal housing.

DEFINITIONS

Active Recreational Use:

Recreational use usually with buildings or with a concentration of users such as golf courses, other playing fields, trailer parks, campgrounds and conservation areas with facilities.

Agriculturally Related Commercial Uses:

Uses directly related to agriculture and necessary in close proximity to farm operations, such as animal husbandry services, produce or grain storage facilities, or farm machinery outlets.

Housing Capacity:

Total maximum livestock/poultry capacity for the facility at any one time.

Institutional Use:

Uses such as schools, churches, hospitals, seniors complexes.

Livestock Facilities:

Livestock/poultry barns where agricultural animals are housed and the associated manure storage.

Livestock Unit:

Equivalent values for various types of animals including poultry, based on manure production and production cycles.

Passive Recreational Use:

Recreational use not requiring buildings and not altering the soil or topography, such as open space and environmental areas.

Residential Area:

Areas zoned or designated residential.

Tillable Hectares:

Land, including pasture, that can be worked or cultivated.

Urban Area:

Cities, towns, villages, and hamlets for such uses as residential, recreational, institutional, commercial and industrial.

MINIMUM DISTANCE SEPARATION II DATA SHEET

USE: To determine the required minimum distance for livestock and poultry facilities within agricultural areas.

PURPOSE: To permit the orderly development of livestock operations within agricultural areas, and to reduce the potential for environmental conflicts between livestock or poultry operations and incompatible land uses.

APPLICATION:

- As a method of siting livestock and poultry housing and manure facilities by municipalities through incorporation into by-laws as authorized under the Planning Act.
- As a guideline for certification of new, proposed expansion of or modification of livestock facilities under the Ontario Certificate of Compliance Program.

The following information is to be completed as it relates to the livestock operation.

Farm Name/Owner _____

Farm Location: County/Region _____ Twp. _____ Lot _____ Con. _____

Address: _____ Postal Code: _____ Phone: (____) _____ - _____
Fax: (____) _____ - _____

This project consists of:

- | | |
|---|---|
| <input type="checkbox"/> Existing livestock or poultry facilities. | <input type="checkbox"/> New livestock or poultry facilities. |
| <input type="checkbox"/> Modifications to existing livestock or poultry facilities. | <input type="checkbox"/> Pollution abatement program. |
| <input type="checkbox"/> Manure storage. | <input type="checkbox"/> Rebuilding (ie. after fire). |

Use the table below to list the type and number of livestock or poultry housed at any one time on the property:

Type of Animal Housed/Fenced	HOUSING CAPACITY	
	Existing Operation	Final Operation
e.g. chicken broilers	20000	22000

Manure Storage Information:

Dry Manure Collection

- ☐ Stable Cleaner/Belts
☐ Tractor Scraper
☐ Manure Pack in Barn
☐ _____

Dry Manure Storage

- ☐ Manure Pack
☐ Roofed Solid Storage
☐ Open Solid Storage
with Concrete Runoff
Tank
☐ Open Solid Storage
with Earthen Runoff
Tank
☐ Open Solid Storage
☐ _____

Liquid Manure Collection

- ☐ Stable Cleaner, Alley Scraper
☐ Flush System
☐ Flow Gutter,
Fully-Slatted Floors
☐ Flow Gutter, Partially-Slatted
Floors
☐ Full Storage Under Slats

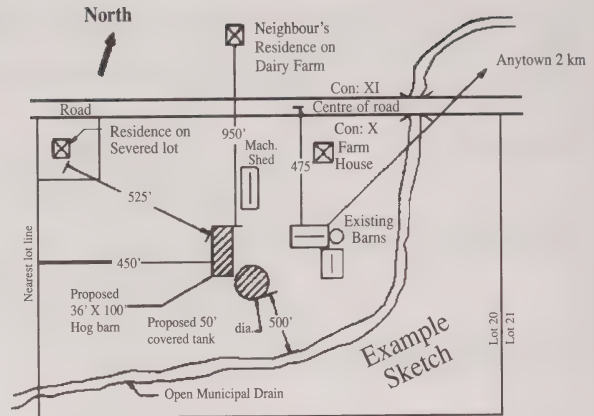
Liquid Manure Storage

- ☐ Full Storage under Slats
☐ Open Concrete or Steel Storage
☐ Open Earthen Storage
Covered Concrete Storage

SKETCH:

The following items must be shown on the property sketch (below):

- Location of all lot lines.
- North direction.
- Location and size of all existing and proposed buildings on the property.
- Distances in metres from proposed structures to public roads and neighbouring dwellings.
- Location and distance in metres of subject structures to all streams, ditches, municipal drains, severances, etc.
- Locations of all manure tanks, pads and earthen storages.
- Location and distances in metres from subject structures to nearest area zoned 'Residential'.
- Locate and Identify (drilled, dug) water wells
- Current use of lands/buildings adjacent to property.
- Any other unusual siting conditions.



Draw Sketch Below: (If necessary, please attach additional drawings for clarification)

MINIMUM DISTANCE SEPARATION II CALCULATION FORM

Farm Name/Owner

Type of Livestock/Poultry	Existing Barn Capacity	Livestock Units	Additional Barn Capacity	Livestock Units	Total Barn Capacity	Livestock Units
Total 1			Total 2		Total 3	

Calculation of Percentage Increase: $\frac{\text{Total 2} \rightarrow []}{\text{Total 1} \rightarrow []} \times 100 = [] \%$

Factor A: Livestock/poultry to be added. Table 1 Factor A: []
 Factor B: Total number of livestock units. Table 2 Factor B: []
 Factor C: Percentage increase. Table 3 Factor C: []
 Factor D: Type of manure system (Solid=0.7, Liquid=0.8) Factor D: []

Building Base distance (A x B x C x D) Base Distance 'F': []

Manure Storage Base Distance Table 4 Base Distance 'S': []

MINIMUM DISTANCE SEPARATION SUMMARY:

		BUILDING: Base Distance	'F' [] metres	MANURE STORAGE: Base Distance	'S' [] metres
Column 1	Col. 2	Col. 3	Col. 4	Col. 5	Col. 6
Neighbouring land use or boundary	Factor	Distance "F" x Col. 2 (m)	Actual Distance (m)	Distance "S" x Col. 2 (m)	Actual Distance (m)
Nearest Neighbour's Dwelling	1.0				
Areas zoned or designated Agriculturally Related Commercial Use Passive Recreational or Industrial	1.0				
Areas zoned or designated Residential, Institutional, Active Recreational, or Commercial. Urban Areas	2.0				
Nearest Side or Rear Lot Line	0.2				
Nearest Road Allowance (Side or Front Lot Line)	0.25				

TABLE 1: FACTOR 'A' (Barn Odour Potential).
and Animals per Livestock Unit (based on housing capacity).

Animals per Livestock Unit		Factor A:	
BEEF	1	Beef Cow ¹	(barn confinement) 0.7
	1	" "	.....(barn with yard) 0.8
	2	Beef Feeders	(barn confinement) 0.7
	2	" "	.....(barn with yard) 0.8
CHICKEN	125	Caged Layers	(manure stored in barn) 1.0
	125	Caged Layers	(daily manure removal) 0.8
	125	Chicken Breeder Layers .....	..... 0.8
	200	Chicken Broilers/Roasters .....	..... 0.65
	500	Pullets (replacement layers) .....	..... 0.7
DAIRY	1	Milking Cow ^{1,2}	(tie-stall) 0.65
	1	" "	.....(free-stall) 0.7
	2	Dairy Heifers	(barn confinement) 0.7
	2	" "	.....(barn with yard) 0.8
DUCK	100	Ducks .....	..... 0.7
EMU	5	Emu .....	..... 0.7
FOX	40	Adult Fox ⁴ .....	..... 1.1
GOAT	4	Adult Goats ³ .....	..... 0.7
	10	Feeder Goats (>20 kg) .....	..... 0.7
HORSE	1	Horse ³ .....	..... 0.65
MINK	80	Adult Mink ⁴ .....	..... 1.1
OSTRICH	3	Ostrich .....	..... 0.7
RABBIT	40	Adult Rabbits ⁴ .....	..... 0.8
SHEEP	4	Adult Sheep ³ .....	..... 0.7
	10	Feeder Lambs (>20 kg) .....	..... 0.7
SWINE	5	Sows/Boars .....	..... 1.0
	20	Weaners (4-30 kg) ⁵ .....	..... 1.0
	4	Feeder Hogs (30-120 kg) .....	..... 1.0
TURKEY	50	Meat Turkeys (>10 kg) .....	..... 0.7
	75	Meat Turkeys (5-10 kg) .....	..... 0.7
	75	Turkey Breeder Layers .....	..... 0.8
	100	Meat Turkeys (<5 kg) .....	..... 0.7
	500	Pullets (replacement breeders) .....	..... 0.7
VEAL	6	White Veal .....	..... 1.0
	3	Red Veal (<300 kg) .....	..... 0.8

Notes: For all other animals/poultry use 1 livestock unit per 450 kg housed at one time (A=0.8).

¹Includes calf to 150 kg.

²A dairy farm usually has milking cows, dry cows, heifers and calves. Multiply the number of milking cows by 1.5 to account for the followers when they are all kept on the same farm.

³Includes offspring until weaned.

⁴Includes offspring to market size.

⁵Multiply number of sows by 2.4 to determine the number of weaners.

TABLE 2: FACTOR 'B' (Final Livestock Units).

Livestock Units			Factor B			Livestock Units			Factor B			Livestock Units			Factor B			Livestock Units			Factor B		
5	—	107	95	—	313	500	—	578	1600	—	821												
6	—	119	100	—	318	520	—	585	1650	—	829												
7	—	129	110	—	327	540	—	592	1700	—	836												
8	—	138	120	—	335	560	—	598	1750	—	844												
9	—	145	130	—	343	580	—	605	1800	—	851												
10	—	152	140	—	350	600	—	611	1850	—	858												
12	—	164	150	—	357	620	—	617	1900	—	865												
14	—	175	160	—	366	640	—	623	1950	—	872												
16	—	183	170	—	374	660	—	629	2000	—	879												
18	—	191	180	—	383	680	—	635	2100	—	892												
20	—	198	190	—	392	700	—	640	2200	—	905												
22	—	205	200	—	400	720	—	646	2300	—	917												
24	—	210	210	—	409	740	—	651	2400	—	929												
26	—	216	220	—	418	760	—	656	2500	—	941												
28	—	221	230	—	426	780	—	661	2600	—	952												
30	—	225	240	—	435	800	—	666	2700	—	963												
32	—	230	250	—	444	850	—	679	2800	—	974												
34	—	234	260	—	452	900	—	690	2900	—	985												
38	—	241	280	—	470	1000	—	713	3200	—	1015												
40	—	245	290	—	478	1050	—	723	3400	—	1034												
45	—	253	300	—	487	1100	—	733	3600	—	1053												
50	—	261	320	—	501	1150	—	743	3800	—	1071												
60	—	275	360	—	522	1250	—	762	4200	—	1105												
65	—	281	380	—	531	1300	—	771	4400	—	1121												
70	—	287	400	—	540	1350	—	780	4600	—	1136												
75	—	293	420	—	548	1400	—	789	4800	—	1152												
80	—	298	440	—	556	1450	—	797	5000	—	1166												
85	—	304	460	—	564	1500	—	805	7500	—	1326												
90	—	309	480	—	571	1550	—	813	10000	—	1455												

TABLE 3: FACTOR 'C' (Percentage Increase).

Percentage Increase			Factor C			Percentage Increase			Factor C			Percentage Increase			Factor C		
0-50	—	0.70	120	—	0.86	280	—	1.03									
55	—	0.72	130	—	0.88	300	—	1.04									
60	—	0.73	140	—	0.90	325	—	1.05									
65	—	0.75	150	—	0.91	350	—	1.06									
70	—	0.76	160	—	0.92	375	—	1.07									
75	—	0.77	170	—	0.94	400	—	1.08									
80	—	0.78	180	—	0.95	425	—	1.09									
85	—	0.79	190	—	0.96	450	—	1.10									
90	—	0.81	200	—	0.97	500	—	1.11									
95	—	0.82	220	—	0.99	550	—	1.12									
100	—	0.83	240	—	1.00	650	—	1.13									
110	—	0.85	260	—	1.02	700	—	1.14									

Note: For new livestock farms or if the % increase is greater than 700 percent, use Factor C = 1.14

TABLE 4: SITING DISTANCES FOR MANURE STORAGE (metres).

- Column 1: Roofed or covered storages for manure, runoff, and milkhouse washwater. Includes any covered or roofed concrete, steel or earthen storages, in-barn solid manure packs, and storages under fully slatted floors.
- Column 2: Open solid manure pile on concrete slab. Includes the runoff storages (concrete or earthen) used for capturing seepage liquids from solid manure storage or runoff liquids from yards. If yards are scraped into runoff storage, use column 3 when runoff storage is a concrete or steel tank and column 4 when runoff storage is earthen. Milkhouse washwater may be added to runoff storage.
- Column 3: Open concrete or steel tanks used for storing liquid manure, milkhouse washwater, or yard runoff where yard is scraped into storage.
- Column 4: Open earth-sided or earth-sided storage with concrete floor to be used for storing liquid manure or yard runoff when yard is scraped into storage or milkhouse washwater.

MANURE STORAGE BASIC DISTANCE 'S'

Minimum Base Distance 'F' for the Building (m)	Column 1	Column 2	Column 3	Column 4
	Covered Storage Systems (m)	Open Solid and Runoff Storage Systems (m)	Open Liquid Tank and Runoff Storage Systems (m)	Earthen Liquid and Runoff Storage Systems (m)
40	40	55	119	324
45	45	60	123	326
50	50	65	128	328
55	55	70	132	331
60	60	74	136	333
65	65	79	140	335
70	70	84	144	337
75	75	89	149	340
80	80	94	153	342
85	85	99	157	344
90	90	104	161	346
95	95	108	166	348
100	100	113	170	351
105	105	118	174	353
110	110	123	178	355
115	115	128	182	357
120	120	133	187	360
125	125	138	191	362
130	130	142	195	364
135	135	147	199	366
140	140	152	204	368
145	145	157	208	371
150	150	162	212	373
160	160	172	220	377
170	170	181	229	382
180	180	191	237	386
190	190	201	246	391
200	200	210	254	395
210	210	220	263	399
220	220	230	271	404
230	230	239	280	408
240	240	249	288	413
260	260	269	305	422
280	280	288	322	430
300	300	307	339	439
320	320	327	356	448
360	360	366	389	466
380	380	385	406	475
400	400	404	423	484
420	420	424	440	492
440	440	443	457	501
480	480	482	491	519
500	500	502	508	528
550	550	550	550	550

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